Rodtech UK

AWARD WINNING, INDUSTRY APPROVED POWER SWEEPING EQUIPMENT

The 2014 Best Practice Guide for Rodtech Power Sweeping Equipment

Our products are covered by :- Patent number: GB2500288. Patent Pending: PCT/GB2012/053091 and EP12165514.6

Our Rodtech **Click** Range come with a **12 month replacement Warrantee**. The warrantee covers all Non-wearable parts and joints on our Rodtech click range. It does NOT cover misuse of equipment or when the equipment is used with the tile breakers It does not cover parts that will wear with use, such as head inserts (Nylons, Chain and Wire etc) You must read the manual for guidance. In the unlikely event you will ever need to use this warrantee, you will be required to return the product to Rodtech or a Rodtech Agent before a replacement part is supplied (subject to our misuse policy).

PLEASE NOTE: The button lock range is not covered by this warrantee.

1. Always follow manufacturers instructions when using powered equipment.

2. Liner Manufactures only approve **RODTECH POWER SWEEPING** equipment. This includes the replacement nylons for the heads, in order to safeguard their warranties. The nylons used by Rodtech are hexagonal and allow the flat sides of the strands to scrape the deposits off within a flue. Other shaped nylons have been tested but **DO NOT** produce the same effect. The Rodtech Click Rods can be used for both manual and power sweeping, together with drain and duct cleaning. All new click rod equipment comes with a **1 year warrantee** (excluding the use of removing clay liners).

3. Only use professional drills for power sweeping that have a safety clutch that will stop the drill immediately when the trigger is released. We recommend using a minimum of 18V Cordless drills that have at least a 2.6ah battery; these can be angle or conventional drills however we do not recommend using drills with a speed greater than 1800rpm or less than 400rpm. We find these are preferable to mains versions as they do not involve dangling leads. It is advisable to have two batteries along with a spare drill and drill adaptor. We recommend that the spare drill is minimum 24v or preferred 36v for the 18mm rods when sweeping larger flues, removing bird nests, removing clay liners or any other application where you may put strain onto the drill and could cause it to burn out.

Recommended drills are; Dewalt 18V angled drill together with a 36v drill of personal choice. Alternatively you will be able to use just one drill unit as recommended on our site, being the Hitachi DV18 DSDL 18 Volt Combi Drill, this particular drill has 92 NM of torque and should handle the toughest of chimneys.

4. When using power sweeping to clean chimneys it is important not to put too much of a bend on the rods as they can distort, heat up and break. Also never keep the rods spinning in the chimney if you are not moving the rods up or down as friction can cause the rods to heat up and possibly break.

5. In Extreme cold weather (-30c and below overnight temperatures) we do advise you store your tools and batteries in the warm as in cold conditions batteries can lose their charge and the rods can become brittle and could snap

6. Always hold the drill in a manner that, if the head gets snagged on something in the chimney the drill will pull out of your hand and not twist your wrist. The angle of the drill should be such that the handle of the drill should be upright opposed to the way you would normally use a drill, trying to keep the rods as straight as possible at all times.

7. When power sweeping, never grip the rods tightly as this could pull your gloves off your hands or burn your hands. Never allow loose clothing or material to get too close to spinning rods as any snags that may occur on the rods could catch and pull. If this should ever start to happen immediately release the power trigger on your drill and STOP. To remedy this, reverse the direction on your drill and slowly spin your drill until the catch/snag is released.

8. When connecting the rods, keep them as straight as possible to ensure a smooth action. When using the click range you will not need to depress any buttons as they have been designed to click together easily, and when they lock together they will make a click, Whereas if you are using the button lock range you will have to depress the button to connect the rods to each other. When disconnecting the rods, again keep the rods as straight as possible, as trying to uncouple them with a bend can be very difficult. With this in mind keep a can of WD40 or preferably spray silicone lubricant handy in the van and spray the drill adaptor and the ends of the rods frequently to keep them in tip-top condition, which will also make connecting and disconnecting as easy as possible. Please remember that smokeless fuel is very corrosive & must be removed from your equipment as soon as possible as it will cause rust. Never leave your equipment in a moist environment.

9. The button lock range has one type of drill adaptor whereas the click range drill adaptors come in two varieties; with and without a button. You will only require the button version if you are sweeping chimneys from the top, duct cleaning or drain cleaning.

Please always ensure that the drivers are fully inserted into the drill chuck and must always be tight fitting, failure to do so will cause the drill adapter to fail and would not be covered under warranty.

Drill drivers are therefore regarded as a consumable item & we recommend that you always have a spare one available.

10. For the click range you will find that the drill adaptor without a button can been marked with a permanent marker on the flat side to aid in the ease in which you can locate the female connection of the Rodtech Click Rods.

11. DO NOT tamper with the button connections on any of this equipment.

12. With traditional rods, if your brush gets stuck or you are trying to remove a nest you are limited to only being able to turn the rods one way unless you use lock tight rods which can be difficult to connect and disconnect.

13. With traditional sweeping your brush creates surface friction / tension as it passes through the chimney sometimes causing the flue to move while you are trying to sweep it. Any build up in the flue will cause the chimney to narrow and even more surface friction / tension will occur, making sweeping harder. It has been proved traditional sweeping is more damaging to the structure of the chimney (as demonstrated in our educational video on our website www.rodtechuk.com).

14. With power sweeping, the brush head utilizes centrifugal force to expand the brush to suite the flue size you are sweeping, it also centers itself and navigates corners and bends more effectively, and therefore you do not require a vast range of brushes. Because it is not a traditional brush there is minimal surface tension being created in the sweeping process as the head adjusts to fit the flue. You adjust the force of the sweeping action by increasing the speed of the drill. This has the effect of stiffening the brushing action on fast speeds and softening the brush on slower speeds. So if you are doing an older style chimney with loose or worn sides then you would use a low speed (1st gear), however if you are doing a heavily built up clay/steel flue then you can increase the speed giving you an increased effectiveness at cleaning.

15. When you are sweeping a lined appliance use the lower speed (1st gear) when going up the flue in case there is anything that could snag the head (nesting material etc). When you are descending increase the speed up a gear.

16. The 300mm (12") head & 12mm rods are not suitable to sweep open fires. Use the correct rods and head for the sweeping job in hand.

17. When you are sweeping a square/rectangular flue ascend in one direction and descend in the opposite direction.

18. There are different coloured rods in the sets this is to allow you to mark the first rod and any change in flue size within the flue so that you can adjust the speed and direction within the flue giving you a visual aid when the brush head is about to exit the flue or structural change within the flue.

19. When power sweeping in larger chimneys the action of sweeping clockwise pulls the brush head to the right. Likewise if you reverse the drill direction (anti-clockwise) the head will gravitate to the left.

20. In short power sweeping cleans chimneys more effectively while causing less strain on the structure of the flue, and also speeds up the sweeping process while making lighter work for you. It also reduces the need to have a van full of occasionally used brushes.

21. Although power sweeping has been proven to increase the amount of deposits that can be removed from a chimney, it is worth remembering that with this method of sweeping (as with anything new), the sweep has to adapt to it.

It is unusual to break or damage rods in the learning process with our Rodtech solid rods, provided you adhere to this manual as well as using and maintaining the equipment properly, should there be a manufacturing fault with the Click Rod joints or ferrules etc, they are covered under our 1 year warrantee.

22A. When sweeping a chimney if you come to a point where the head stops, due to an obstruction, **DO NOT** force the brush to keep going. Simply bring the rods down 30 to 60 cm (a foot or two) change the direction of the head from clockwise to anti clockwise or vice-versa (making sure your drill is in 1st gear) and try again. This will allow the head to be re-positioned within the flue and then you should be able to carry on sweeping easily. Should this not work, there is a high likelihood that there is a nest or integral damage to the flue. You as the operative will have to make this judgment call and using the appropriate equipment (camera to CCTV, or Birds nest remover should there be evidence of twigs and debris? We stock both of these items should you require them) to solve the problem. **Remember do not force the equipment.**

22B. Cowls;
Some cowls can be very sharp, and the effect of spinning the rod against these objects can cut a rod. To sweep these flues it is important to try not to exit the cowl as this could damage your rod, so from the start of the job, judge the height, when you get towards the top of the flue, stop spinning the drill and check if you can see the head. If the head is not visible push the rod until you feel or hear the head hit the inside top of the cowl (now visually check). If the head has exited the hat, please judge the distance the head is out and pull the rods back into the flue manually (check again). Now the head is at the top of the flue (not out of the cowl), you can continue to power sweep downwards safely. These can be tricky, and it is your job to make sure that the flue is clear of burning byproducts.

23. It is advisable to check your equipment. It is good practice to maintain your van and equipment on a daily basis & have a set time at the end of each week for general maintenance and cleaning of equipment used. Make sure there are no stress marks in your rods. Make sure that the nuts are tight on the heads and that the strands are fit for use. Drills & batteries etc are clean. In short your appearance and that of your equipment and vehicle are what makes you stand apart from your competition and is a sign of a true professional.

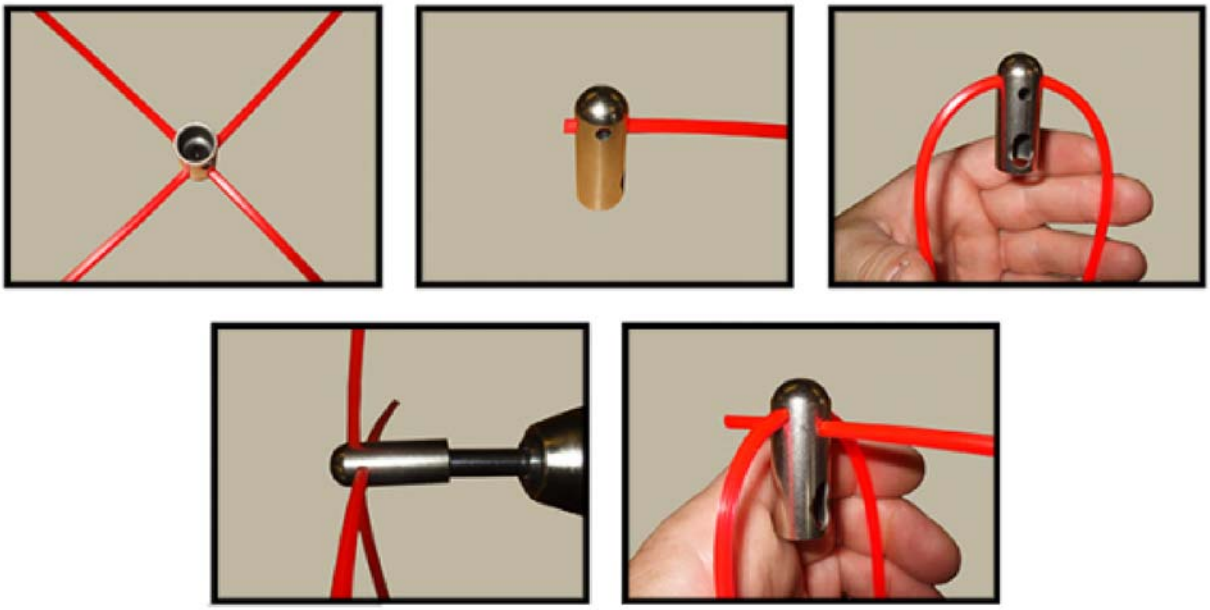
24. This could be a new sweeping method to you and the feeling you gained with traditional sweeping will not be the same as power sweeping. It is only experience that will teach you the best way to adapt to each situation. After using the equipment for a period of time (just as traditional sweeping) the feelings of what the equipment is doing will come to you.

25. There are many different heads designed for the power sweeping method, which cover; Oil, gas, ducting, chimney sweeping, tar removal, bird nest removal and clay liner removal. We also have adaptors for the Click rods which enable the rods to be used for drainage and other application.

26. The 250mm (10”) Bullet head has been designed for use with the 8mm system. It can be used both clockwise and anticlockwise mode, and can fit through an opening as small as 50mm without losing any performance. It is designed to sweep oil/gas and ducting flues.

27. To re-strand the 250mm (10”) Bullet head, you must locate the grub screw, housed in the connection area at the bottom of the head. Remove this grub screw (5mm hex) to release the existing nylon strands, remove the strands. Thread the new Nylon strand into the top hole as illustrated, and then bend the strand, so that the Nylon is centralised and allows the second strand to be pushed into the lower hole easily. Repeat the bending of the Nylon to locate it centrally, some people find it easier to use a tape measure for greater accuracy.

Remember that if the strands are not centralised the head will be off balance and could cause a juddering motion, the head is designed to allow a moderate deviation from the exact centre, so you can use your eye should you feel confident. Finally tighten the grub screw with an Allen key and your Bullet head is now ready to use.



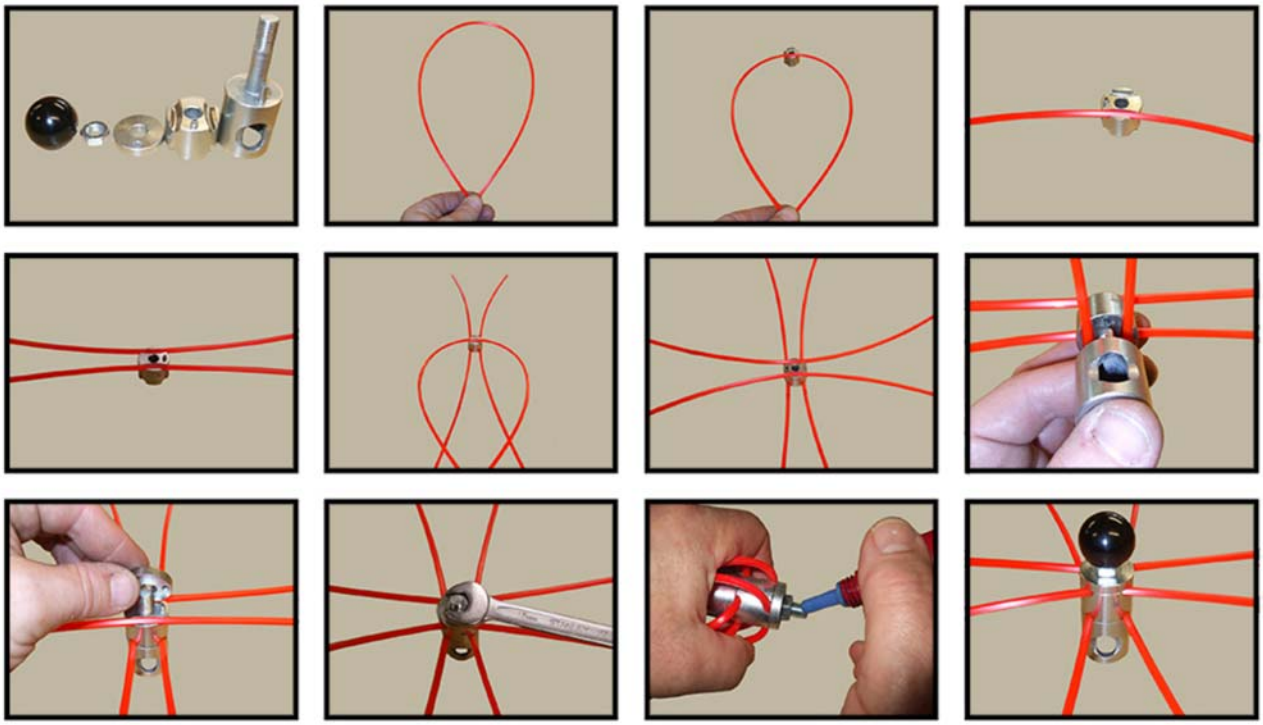
28. 300mm Power Sweeping Brush. This 300mm (12”) head is designed to allow you to do the day-to-day cleaning of flues from 150mm to 200mm (6” to 8”). The design has a unique feature in that it can fit through a narrow gap such as bolted in throat-plates and dampers, which have been fitted in stoves and flues sometimes without sweeping access points. It also can fit through most firebox openings without the need to remove the plate. The whip heads contain nylon strands, which aid the sweeping of chimneys cleanly. The nylons are six sided strands, which generate flat sides to enhance the cleaning process. As the heads can turn clockwise and anti-clockwise they are able to cover small chimneys with ease. The nylon strands are very simple to replace (see separate illustrations on how to re-strand later in this document), so the tool can be used for years to come which makes them far more cost effective then there tradition brush equivalents. The speed of the drill determines the force generated to clean the chimney. It is always advised to use low speeds in pre 1966 chimneys (rendered flues), and to always use battery power tools to safe guard yourself.

29. To re-strand the 300mm or 600mm Power Sweeping Brush you will need a 13mm spanner or ratchet and a small bottle of Loctite 243 thread locker or similar.

Firstly unscrew ball end, this will be tight as it has thread locking glue on it to hold it in place. Should you find it very difficult, wrap the ball in a small amount of cloth and use mole grips or vice to turn this off.

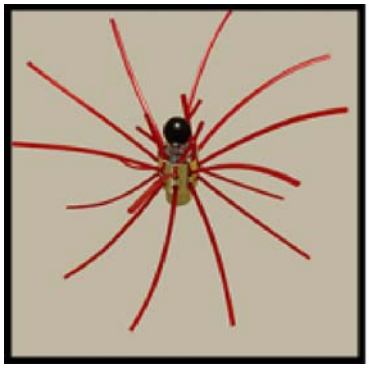
Use your 13mm spanner to remove the nut and it will then separate into 5 component parts. Using your Rodtech replacement strands follow the steps as illustrated below. You will need to gently hold both ends of the strands together to give you an approx. midpoint, and then place in the appropriate channels as shown. The groves on the central cylinder have been designed so that they will grip the replacement strands in place, making this a simple process.

The cylinder now holding the strands can be placed on the ferrule spindle. Remember that the cylinder can only go one way round as the pins have to locate. Making sure that the pins have slotted in correctly, now replace the nut, and tighten with your spanner. If you do not feel that the strands look equidistant, you can use a tape measure to check, prior to totally tightening the nut. You must now drip some Loctite 243 or equivalent onto the thread, and locate your ball end back on. Without this thread lock your ball end could fall off. If you are replacing the steel strands of the bird nest remover or the chain of the tar remover, follow the same procedure as described above, with the exception that the chain has to be located at the end of the chain and not in a central position.

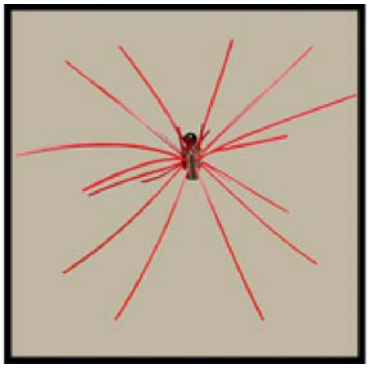


30. 600mm Power Sweeping Brush. This 600mm (24”) head is designed to allow you to do the day-to-day cleaning of flues greater than 200mm (8” & greater). The design has a unique feature in that it can fit through a narrow gap such as bolted in throat-plates and dampers, which have been fitted in stoves and flues sometimes without sweeping access points. It also can fit through most firebox openings without the need to remove the plate. The heads contain nylon strands, which aid the sweeping of chimneys cleanly. They are six sided strands, which generate flat sides to enhance the cleaning process. As the heads can turn clockwise and anti-clockwise they are able to sweep small chimney flues with ease. The nylon strands are very simple to replace (see section 29 on how to re-strand), so the tool can be used for years to come which makes them far more cost effective then there tradition brush equivalents. In Flues greater than 500mm (20”) you must ensure that you use one direction going up the flue and the reverse on its decent (clockwise/anticlockwise) you may also have to repeat this process a couple of times. The speed of the drill determines the force generated to clean the chimney. It is always advised to use low speeds in pre 1966 chimneys (rendered flues), and to always use battery power tools to safe guard yourself.

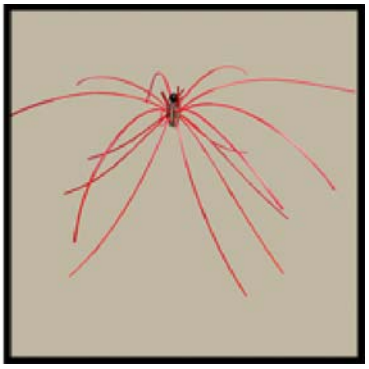
31. The Super Scrub heads come in three sizes, 300mm (12”), 600mm (24”) and Inglenook 900mm (36”). They are strung differently; the 300mm head has strands going sideways while the 600mm and 900mm head has strands going up and down.



300mm SuperScrub



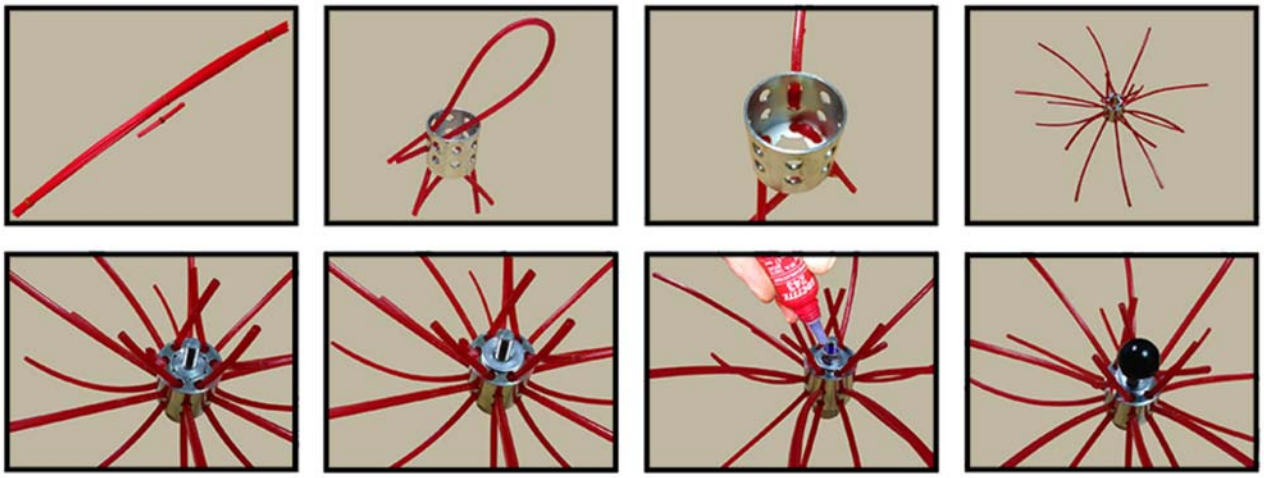
600mm SuperScrub



900mm SuperScrub

32. The smaller Super Scrub head (300mm) is designed for sweeping flues attached to appliances such as woodburners and multi-fuel stoves etc. The Medium Super Scrub head 600mm is for all other flues, with the exception of extremely large flues where the 900mm Inglenook SuperScrub is advised. The head size should be chosen according to the flue you are sweeping. Please refer to the size guide given with each head towards the back of this Document in section 41.

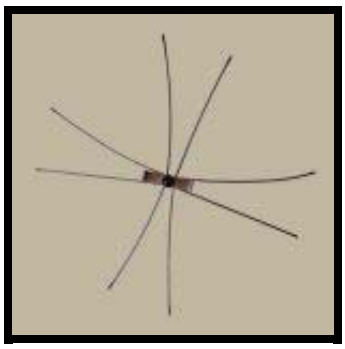
How to re-string your SuperScrub head



33. Chain Tar remover. This head is designed to clear tar and creosote within clay lined flues and chimney pots.

THIS MUST NOT BE USED IN STAINLESS STEEL LINERS OR OTHER FRAGILE FLUES. This is not designed for general power sweeping, Warning this product may cause structural damage to the chimney if not used in correct application and with caution.

34. The Bird nest remover can also be used as a tar/creosote remover within unlined flues and lined flues. **This product must never be used within stainless steel liners.**

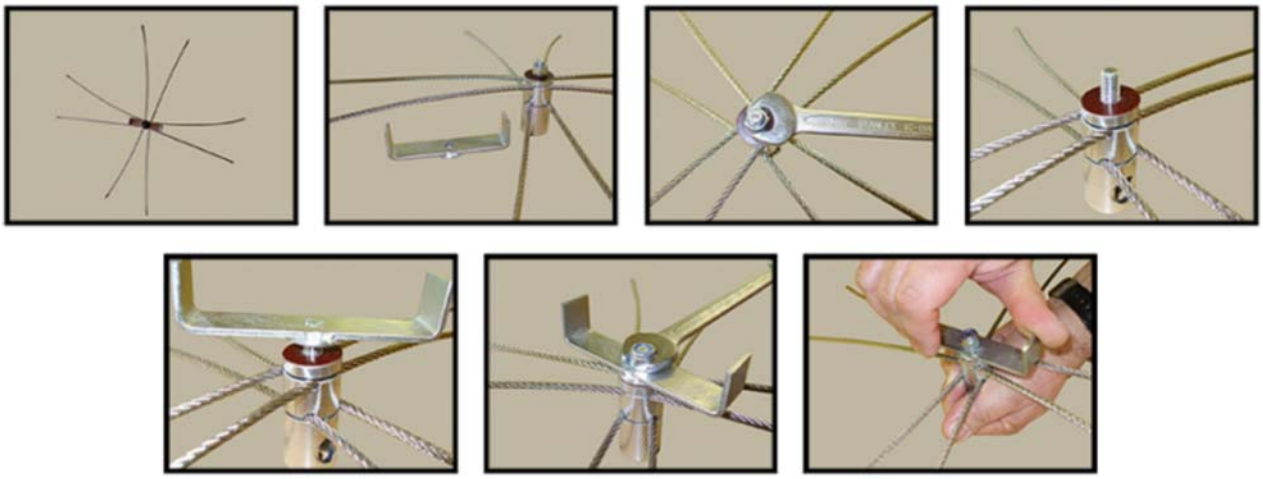


35. The bird nest remover. **THIS MUST NOT BE USED IN STAINLESS STEEL LINERS**. The Tips of the stainless steel strands have been welded to protect the user and allow longer use of this product, however with use they can unwind and will be sharp! Handle with caution as these can cut and leave metal splinters if not handled with care! The bird nest remover should remove a bird's nest with ease, however if a stubborn nest is found the propeller can be attached to snap the twigs (this is a last resort as the propeller can cause damage to a flue if not used correctly). If you are using the nest remover with the propeller you **MUST** use it in a clockwise direction, or the holding nut can easily become loose.

36. When using the Bird nest remover, be advised that the nesting material can drop down the chimney and reform behind the brush head, so try and make sure that you remove the nest slowly making sure that the nest debris clears all the way down before removing more. With the Click Rod system you can purchase additional Advanced Mid-Rod Excellence heads to aid in the smooth removal of a nest.

When attaching the 4 inch propeller please make sure that it is attached between the nut and the slip washer provided. **YOU MUST** exercise extreme **CAUTION** when using the propeller attachment. The propeller has been designed so that it **MUST** be used with the slip washer provided! This washer provides a safety measure, so that should the propeller meet with an obstruction that it cannot snap, the propeller will cease to rotate, avoiding snapping your rods, and possibly causing injury to the user. **THE PROPELLER ATTACHMENT IS ONLY TO BE USED BY COMPETENT PROFESSIONALS AND MUST BE HANDLED WITH EXTREME CARE.**

37. To re-strand the bird nest remover, please see how to re-strand the Power sweeping brush 300mm and 600mm in section 29. **YOU MUST** make sure you do not lose the slip washer which houses between the locking nut and the top locking cylinder. When you were supplied with the bird nest remover, you will have found the propeller attachment in a bag, attached to the equipment. **YOU MUST READ SECTION 34 to 36** before using this equipment. To connect the propeller attachment, use a 13mm spanner and remove the locking nut. **DO NOT REMOVE the slip washer** as this is a safety feature. Place the propeller on top of the slip washer, and then tighten the locking nut. To make sure it is correctly fitted and tightened sufficiently **YOU MUST** see if the propeller can be turned by hand. This should offer resistance, but still with reasonable force be able to turn. It has been designed so that, should the propeller stop whilst you are still rotating the rods, the operative should not suffer injury. We reiterate that the propeller should only be used as a last resort, and only by competent operatives.



38. Small clay liner removing tool. This 100mm x 100mm (4" x 4") small clay liner removing tool attaches ideally to the 1M x 18mm rods. This product removes the clay liner by breaking it to pieces. Ideal size of flue for removal is 150mm (6") to 200mm (8"). Must be used with care and dust control.

When using the clay liner removing tools it is recommended that you use a 36v cordless drill together with the 18mm rods.

Due to the weight and the speed in which the clay liner tools are used, you must always slowdown the speed of your drill when stopping, thus avoiding snapping rods unnecessarily. The forward momentum of the weight on the end of the rods can be so great as to snap the rods or even pull the drill out of the operators' hand. It may be advisable to allowfor a rod replacement within a quote of this type of work.

39. Large clay liner removing tool. This 100mm x 150mm (4" x 6") Large clay liner removing tool attaches ideally to the 1M x 18mm rods. This product removes the clay liner by breaking it to pieces. Ideal size of flue for removal is 200mm (8") and above. Must be used with care and dust control.

When using the clay liner removing tools it is recommended that you use a 36v cordless drill together with the 18mm rods.

Due to the weight and the speed in which the clay liner tools are used, you must always slowdown the speed of your drill when stopping, thus avoiding snapping rods unnecessarily. The forward momentum of the weight on the end of the rods can be so great as to snap the rods or even pull the drill out of the operators' hand. It may be advisable to allowfor a rod replacement within a quote of this type of work.

40. The retrieval tool is to aid in the removal of birds nests and can also be used to retrieve rods and brushes that customers may have lost in chimneys.
THIS ATTACHMENT MUST NOT BE USED WITH A DRILL AS IT CAN SNAG INSIDE A CHIMNEY AND CAUSE DAMAGE.

41. There are 4 different sizes of rods available for power sweeptting and as a general rule the rod size you would chose for conventional sweeping can be down sized by one when power sweeping. All ButtonLok rods connect in the same "easy to use" way. The 8mm rods have smaller ButtonLoks than the other rods, but can connect to them with adaptors.

42. 1M x 8mm Solid button lock rod for use In gas/oil/lint and small ducted flues. This extremely flexible and versatile rod enables you to efficiently clean up to 150mm/6" oil/gas and other ducting flues with the appropriate ButtonLok attachments.

43. 1M x 12mm Solid Click & Button lock Rod. These highly flexible and hard wearing solid section rods are ideally suited for flues and ducting within a range of sizes from 125mm (5”) to 200mm (8”), such as lined appliances. They can be used with a verity of attachments for power sweeping/cleaning.

44. 1M x 15mm Solid Click & Button lock Rod. These flexible and hard wearing solid section rods are ideally suited for flues and ducting within a range of sizes from 150mm (6") to 450mm (18"), usually open fire flues. They come with a verity of attachments for power sweeping/cleaning

45. 1M x 18mm Solid Click lock Rod. These minimal flex and hard wearing solid section rods are ideally suited for flues and ducting with a range of sizes upwards of 450mm (18 inches) mainly inglenooks. They come with a verity of attachments for power sweeping/ cleaning. These rods are also used for breaking old or damaged clay liners by the use of the Tile breaker attachments. These rods are best used with a minimum 24v (ideally 36v) Cordless power drill.

46. 1M x 18mm Solid Click & Button Lock Rod. These minimal flex and hard wearing solid section rods are ideally suited for flues and ducting with a range of sizes upwards of 300mm (12 inches). They come with a verity of attachments for power sweeping/cleaning. These rods are also used for breaking old or damaged clay liners by the use of the Tile breaker attachments. These rods are best used with a minimum 24v (ideally 36v) Cordless power drill.

47. The Rodtech Click to Quarter Inch Whitworth Adaptor is to allow quarter inch Whitworth brushes to be used with Rodtech Click rods should the operator desire to manual sweep. It comes with a grub screw so that you can secure your desired brush to the adaptor to be able to turn your Rodtech Click rods clockwise and Anti-clockwise when manually sweeping providing the grub screw has been tightened sufficiantly. Traditional brushes should never be used when power sweeping and should only be used for manual sweeping.

48. There are three methods of preferred dust control to be used with power sweeping. Inflation bags, Sponge blocking system, and lastly sheet and pole method. We stock the inflation bags and sponge blocking systems. We also run training courses on the best ways of blocking flues, fireplaces and inglenooks without the requirement of tapes and soot sheets.

49. As with any new technology the best practice guide as it stands is just that BEST PRACTICE. The guide will always be updated and adjusted as and when improvements can be made. But it does not eliminate the risk of hazards occurring. It is ultimately down to you the sweep to use the power sweeping method in a responsible manner. We believe once you have tried power sweeping and adapted it to your own requirements you will be pleased with the results you will achieve, and the speed at which the cleaning is done. Further the customer always gets the cleanest, fastest sweep making them happier in the process.

If you discover a technique or manner of sweeping not described in this best practice guide that you believe will benefit others please let us know so we can continue to keep our customers up to date with the best sweeping methods.

Disclaimer

All details in this guide are correct at time of publication.

Whilst every attempt is made to ensure the information in this guide is helpful and accurate, Rodtech UK Ltd, The National Association of Chimney Sweeps or its affiliates cannot be held responsible for any mishap that may occur whilst using the equipment or techniques detailed in this guide.

This is a best practice guide only and should not be used solely as a reference.

Rodtech and NACS maintain that the NACS code of conduct, NACS code of practice, Building Regulations and the Health and safety at work acts be followed at all times.

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